

1. (Amended) A method for preparing mesophase pitch-based tape comprising the step of:

extruding mesophase pitch through a slot-shaped die with an aspect ratio of 50 or more and drawing at a draw ratio greater than 5, wherein the shear rate in the die is in the range 1000 to 5000s<sup>-1</sup>.

2. (Amended) A method as claimed in claim 1 further comprising the step of stabilising the mesophase pitch-based tape.

3. (Amended) A method as claimed in claim 1 further comprising the step of oxidatively stabilising the mesophase pitch-based tape.

4. (Amended) A method as claimed in claim 1 wherein the mesophase pitch-based tape has a major surface and planar molecules arranged mainly parallel to the major surface.

6. (Amended) A method as claimed in claim 1 wherein the mesophase pitch-based tape is subjected to an elevated temperature.

7. (Amended) A method as claimed in claim 1 wherein the aspect ratio of the die is 60 or more.

8. (Amended) A method as claimed in claim 1 further comprising the step of carbonisation or graphitisation.

14. (Amended) A method as claimed in claim 1 wherein the shear rate is in the range 1900 to  $4000\text{s}^{-1}$ .

15. (Amended) A method as claimed in claim 1 wherein the aspect ratio of the die is about 80 and the shear rate is in the range 1700 to  $4900\text{s}^{-1}$ .

17. (Amended) A method as claimed in claim 1 wherein the draw ratio is greater than 10.

18. (Amended) A method as claimed in claim 1 wherein the tape is of flat-layer transverse texture, said method further comprising the step of laminating the tape with a material capable of controlling the thermomechanical properties, transport properties or resistace to oxidation of the tape.

20. (Amended) A mesophase pitch-based tape obtainable from a method as defined in claim 1 comprising graphite basal planes parallel to the major surface of the tape.

23. (Amended) A mesophase pitch-based tape as claimed in claim 20 comprising a flat layer transverse texture.

25. (Amended) A mesophase pitch-based tape as claimed in claim 20 comprising an extended graphitic plane structure.